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Adolescent gambling and gambling-type games on social networking sites: Issues, concerns, and recommendations

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Adolescent gambling and gambling-type games on social networking sites: Issues, concerns, and recommendations

Summary. *Research indicates that compared to the general population, teenagers and students make the most use of social networking sites (SNSs). Although SNSs were originally developed to foster online communication between individuals, they now have the capability for other types of behaviour to be engaged in such as gambling and gaming. The present paper focuses on gambling and the playing of gambling-type games via SNSs and comprises a selective narrative overview of some of the main concerns and issues that have been voiced concerning gambling and gambling-type games played via social network sites. Overall, there is little empirical evidence relating to the psychosocial impact of adolescents engaging in gambling and gambling-type activities on SNSs, and the evidence that does exist does not allow definitive conclusions to be made. However, it is recommended that stricter age verification measures should be adopted for social games via SNSs particularly where children and adolescents are permitted to engage in gambling-related content, even where real money is not involved.*

Keywords: *Adolescent gambling; Youth gambling; Social networking; Social gaming; Social gambling*

Jocs d'apostes i jocs tipus aposta a les xarxes socials per a adolescents: Temes, preocupacions i recomanacions

Resum. *Els estudis assenyalen que els adolescents fan més ús de les xarxes socials (RRSS) que la població en general. Encara que les RRSS en el seu origen servien per a fomentar la comunicació entre els individus, ara ofereixen oportunitats per a altres tipus de comportaments, entre ells les apostes i els jocs. Aquest estudi centra la seva atenció en les apostes i en la participació en jocs semblants a les apostes a través de les RRSS, i consta d'un resum selectiu d'algunes de les principals preocupacions i temes que s'han plantejat en relació a les apostes i els jocs tipus-aposta que es juguen a través de les xarxes socials. En general, hi ha poques dades empíriques relacionats amb els efectes psicològics sobre els adolescents que participen en apostes i en activitats semblants a través de les RRSS, i les proves que sí que hi ha no porten a conclusions definitives. Sense emargo, aquí es recomana l'adopció de mesures més estrictes per verificar l'edat dels que juguen a través d'RRSS, sobretot quan els nens i els adolescents tenen la possibilitat d'interactuar amb continguts relacionats amb les apostes, fins i tot quan no es juga amb diners de veritat.*

Paraules clau: *Adolescents i les apostes; Joves i les apostes; Xarxes socials; Jocs socials; Apostes socials*

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Introduction

Social Networking Sites (SNSs) are virtual communities where users can create individual public profiles, interact with real-life friends, and meet other people based on shared interests (Andreasson, 2015; Kuss & Griffiths, 2011). SNS usage patterns from both consumer research and empirical research indicate that overall, regular SNS use has increased substantially over the last few years (Andreasson, 2015; Griffiths, Kuss & Demetrovics, 2014). This supports the availability hypothesis that where there is increased access and opportunity to engage in an activity (in this case, social networking), there is an increase in the numbers of people who engage in the activity (Griffiths, 2003a). Research also indicates that compared to the general population, teenagers and students make the most use of SNSs (Griffiths et al., 2014). Although SNSs were originally developed to foster online communication between individuals, they now have the capability for other types of behaviour to be engaged in. For instance, *Facebook* users can (i) play video games like *Farmville* (Griffiths, 2010a), (ii) play gambling-type games like *Texas Hold 'Em Poker* for points rather than money (Griffiths & Parke, 2010; King, Delfabbro & Griffiths, 2010), (iii) gamble for real money on games like *Bingo Friendzy* (Griffiths, 2013) (iv) watch videos and films, and (v) engage in activities such as swapping photos or constantly updating their profile and/or messaging friends on the minutiae of their lives (Kuss & Griffiths, 2011). The playing of games like *Farmville* and gambling-type games such as *Slotzmania* is often referred to as «social gaming» (because they are played via social media).

There have been an increasing number of media reports about the potentially exploitative and/or addictive nature of various types of game that can either be played via social networking sites or be played after downloading apps from online commercial enterprises such as *iTunes* (Griffiths, 2013). Most social games are easy to learn and communication between other players is often (but not always) a feature of the game, and they typically have highly accessible user interfaces that can be played on a wide variety of different devices (e.g., smartphones, tablets, PCs, laptops, etc.). According to Church-Sanders (2011) there are eight different types of social gaming (see Table 1), including virtual currency gambling, most of which can be (and are) played by children and adolescents. Clearly, most people that play social games find them fun and enjoyable to play with little or no problem. However, there is growing evidence (both anecdotal and empirical) that gaming via SNSs can be problematic and addictive to a small minority of players (e.g., Zhou, 2010).

There are arguably three main concerns relating to adolescent social gaming that have been aired in the psychological literature. Firstly, there are concerns about the way games companies are making money from players by making them pay for in-game assets, in-game currency, and/or access to other levels within the game (Cleghorn & Griffiths, 2015). Secondly, there are concerns about how engrossing the games can be, leading to various news reports claiming that a small minority of people appear to be «addicted» to them (Griffiths, 2014). Thirdly, there have been concerns that some types of social games are a gateway to other potentially problematic leisure activities – most notably gambling (Griffiths, 2013b). The present paper focuses on the third of these three issues (i.e., gambling and the playing of gambling-type games via SNSs). However, the paper is not a systematic review, but a selective narrative overview of some of the main concerns and issues that have been voiced concerning gambling and gambling-type games played via social network sites.

Social gaming with gambling-type elements

It has been argued that many social games played on social networking sites have gambling-like elements – even if no money is involved (Griffiths, Derevensky & Parke, 2011; Griffiths, Parke & Derevensky, 2012; King, Delfabbro & Griffiths, 2010). Even when games do not involve money (such as playing poker for points on *Facebook*), they introduce youth to the principles and excitement of gambling (Griffiths & Parke, 2010). At first glance, playing games like *Farmville,* may not seem to have much connection to activities like gambling, but the psychology behind such activities are very similar (Griffiths, 2010a). Companies like *Zynga* have been accused of leveraging the mechanics of gambling to build their gaming empires. One of the key psychological ingredients in both gambling (such as playing a slot machine) and social gaming is the use of operant conditioning and random reinforcement schedules (Skinner, 1953). Random reinforcement schedules in games relate to the unpredictability of winning and/or getting other types of intermittent rewards (Parke & Griffiths, 2007).

Getting rewards every time someone gambles or plays a game leads to people becoming bored quickly. However, small unpredictable rewards lead to highly engaged and repetitive behaviour for those playing such games. In a minority of cases, this may lead to addiction to the game (Parke & Griffiths, 2007). Both gambling operators and social gaming developers can use intermittent and unpredictable rewards to get repeat custom. The psychosocial impact of this new leisure activity has only just begun to be investigated by academic researchers in the gaming field (Griffiths et al., 2014). However, it has been argued that social networking sites have the potential to normalise gambling behaviours as part of the consumption patterns of a non-gambling leisure activity, and may change social understandings of the role of gambling among young people (Griffiths & Parke, 2010). There is no money changing hands, but adolescents – as noted above – are learning the mechanics of gambling, and there are serious questions about whether gambling with virtual money encourages positive attitudes towards gambling in people (and young people particularly). For instance, does gambling with virtual money lead to an increased prevalence of

Table 1. Social networking games by genre (from Parke et al, 2013, adapted from Church-Sanders, 2011)

Genre	Features	Examples
Role playing games	Use the social graph (a player's social connections) as part of the game	*Parking Wars, PackRat, Mobsters, Fashion Wars, Mafia Wars, Vampire Wars, Spymaster*
Management/nurturing games	Main gameplay involves socializing or social activities like trading or growing	*YoVille, Pet Society, FarmVille, Cupcake Corner, CityVille*
Turn-based card, board and parlour games	Played within a social context or with friends	*Farkel Pro, Monopoly*
Virtual currency gambling	Games which would otherwise be played in a gambling context	*Texas Hold'Em Poker, Bingo, Slots*
Competitive casual games	Often word-based with friends only leaderboards	*Words with Friends, Scramble, Scrabble*
Dating and Flirting	Aim to meet (or dump) people	*Friends for Sale, Human Pets, Chump Dump*
Sports games	Based on real-life sporting activities	*Premier Football, Tennis Mafia, FIFA Superstars*
Virtual jokes	Gimmicky games that tend to be popular when initially launched then fade in popularity	*Pillow Fight, Kickmania, Water Gun Fight*

actual gambling? Research carried out by Forrest, McHale and Parke (2009) demonstrated that one of the risk factors for problem gambling among adolescents was the playing of the «play for free» gambling games on the internet (games that are widespread on *Facebook* and other social networking sites).

Based on the available empirical literature, it has been argued that it may be important to distinguish between the different types of money-free gambling being made available – namely social networking modes (on social networking sites) and «demo» or «free play» modes (on internet gambling websites). Initial considerations suggest that these may be different both in nature and in impact. For example, as Downs (2008) has argued, players gambling in social networking modes may experience a different type and level of reinforcement than those gambling in «demo» mode on an internet gambling site. On some social networking sites, the accumulation of «play money» or «points» may have implications for buying virtual goods or services or being eligible for certain privileges. This may increase the value and meaning of the gambling event to the individual.

Additionally, when considering the «flow» and intention of individuals accessing such sites, it could be argued that individuals accessing money-free gambling through social networking sites may be more likely to be induced or persuaded to play given that these website visitors' primary intention may have been social interaction (i.e., the primary function of the website) as opposed to those playing in «demo» mode where gambling is the primary function of the website. A 2011 national gambling survey of British adolescents (n=2739; aged 11-16 years) by Ipsos MORI reported that around one in seven children (15%) had played free or practice gambling games in the past week, and that the most popular form of practice gaming was through *Facebook*. One in ten children (11%) said they had played free games on the social networking website *Facebook*. The report also noted:

> *«There may be some value in tackling children's access to free online trial games. There is a clear link between playing free trial games on the internet and gambling for real money (online and offline). However, regulators will need to target a range of games and websites to monitor this effectively, as children report playing games on a wide variety of websites»* (p.5).

It has also been noted that observers have accused companies like *Zynga* of exploiting well-known psychological principles to increase their player base and to bring in new players from demographic groups that may never have played games before (such as housewives looking after small children at home who might play poker or other quick play social games for 30 minutes while their child is asleep) (Griffiths, 2012). However, that alone does not explain the success of social games. Other features, such as stylish and appealing characters and graphics, and (what some might deem to be) aggressive viral marketing tactics, also appear to play an important part in the acquisition, development, and maintenance of social gaming behaviour (Griffiths, 2012). It has also been argued that introduction of in-game virtual goods and accessories (that people willingly pay real money for) is a «psychological masterstroke» (Griffiths, 2012). In this sense, it becomes more akin to gambling, as social gamers know that they are spending money as they play with little or no financial return. They are buying entertainment, and the intrinsic play of the game itself is highly psychologically rewarding.

Another interesting question in relation to social gaming is why people pay real money for virtual items in games like *Farmville* (or why people will pay real money to buy virtual money to play *Zynga* poker games). A recent qualitative study on the motivations for buying virtual assets found that of particular importance to those who buy virtual items for in-game use were item exclusivity, function, social appeal, and collectability (Cleghorn & Griffiths, 2015). The same study also reported that virtual items enable gamers to express themselves, feel real satisfaction, and build lasting friendships. In this particular study, virtual assets and gaming mostly had a very positive impact on the participants' psychological wellbeing.

Almost anyone that has engaged in social gaming will have played «freemium» products. Freemium social games give free access to the game being played, but players must pay for so-called «premium» services. A

recent review article on social gaming and gambling by Parke, Rigbye, Parke and Wardle (2013) defined «freemium» games as:

> *«A business model in which users of the service (in this context, game) usually play for free but are encouraged to pay: for extended game play; to compete with others/ status; to express themselves; to give virtual gifts; and to obtain virtual goods which are valuable due to their scarcity»* (p.16).

In many social games, players are not charged to advance through the first 35 levels but after that, it costs money for another 20 levels. Players can avoid paying money by asking their *Facebook* friends to send them extra lives. Players are encouraged to buy «boosters» (such as virtual «candy hammers» *on Candy Crush Saga*). Although the price of each virtual asset does not appear to be much, the cost of in-game assets and items can soon mount.

In 2013, many news outlets in the UK covered the story of two boys (aged just six and eight years of age) who spent £3200 on their father's *iPhone* buying virtual farm animals and virtual farm food with real money, £70 at a time (Talbot, 2013). Another case involved a ten-year-old boy who ran up a £3,000 bill on the game *Arcane Empire* on *iTunes* (Gradwell, 2013). As a consequence of these and other high profile cases, the UK Office of Fair Trading is investigating whether children and adolescents are being unduly pressured and/or encouraged to pay for in-game content (including the upgrading of their game membership and the buying of virtual currency) when they play free games.

It has been noted that «freemium» games are psychological «foot-in-the-door» techniques (Griffiths, 2010b) that lead a small minority of people to pay for games and/or game accessories that they may never have originally planned to buy before playing the game (akin to «impulse buying» in other commercial environments). Although social gaming operators need to be more socially responsible in how they market their games and how they stimulate in-game purchasing, parents themselves also need to take responsibility when letting their children play social games or allowing them to download gaming apps.

Research into British slot machine players that play excessively has reported that they know they will lose every penny they have in the long run, and they are playing *with* money rather than for it (Griffiths, 2002). This appears to be what social gamers do too. Like slots players, they actually love the playing of the game itself. Money (including the buying of virtual assets) is the price of entry that they are willing to pay. Unlike those involved in social gaming, gamblers do at least have an outside chance of getting some of the money they have staked back. Therefore, allowing those who play social games the chance to actually get their money back (or gain more than they have staked) is possibly one reason why companies currently operating social games want to get into the «pure» gambling-for-money market. This extra dimension to social games could be a large revenue generator (Griffiths, 2012).

Those in the social gaming business believe that their games tap into some of the fundamental drivers of human happiness and give people pleasure, friendship, and a sense of accomplishment (Griffiths, 2013b). For instance, Lazzaro (2014) claims there are four elemental keys that determine game success. These are (i) *hard fun* (i.e., players having to overcome difficult obstacles to progress in the game in pursuit of winning), *easy fun* (i.e., players just enjoying the game even if they don't win), *altered states* (i.e., players engaging in the game because it makes them feel good psychologically and changes their mood for the better), and *the people factor* (i.e., players wanting to socially interact with others in the game). Put in the most basic of terms, Lazarro claims the most successful games engage players' curiosity, allow players to socialize with friends, challenge players to overcome obstacles to achieve goals, and somehow relate to people's lives in a meaningful way.

Over the past few years, the rapid growth of social gaming has come to the attention of gambling regulators, particularly as the lines between social gaming and gambling are beginning to blur (e.g., Griffiths, 2011; King, Delfabbro & Griffiths, 2010), and because online gambling operators and gambling software developers (e.g., *bwin, Party Gaming, PlayTech,* etc.) are now positioning themselves in the social gaming market, and vice-versa (e.g., *Zynga*). There have also been reports that virtual money can now be traded for real cash illegally. Currently, there appears to be a lack of regulation where children and adolescents are concerned (Griffiths, 2013).

Gambling on social network sites

Most parents will be only too aware that the online social networking phenomenon has spread rapidly. However, gambling and the playing of gambling-type games via SNSs have only recently come into focus. Although the playing of gambling games for points (e.g., poker) has been popular for a number of years (Griffiths, 2010; Griffiths & Parke, 2010), a number of gaming operators are now using SNSs like *Facebook* as a platform from which to offer gambling for real money (Griffiths, 2013). For instance, in August 2012, *Facebook* hosted its first gambling-for-money game (i.e., *Bingo Friendzy* developed by *Gamesys*) – as opposed to gambling-for-points game – that allowed SNS users to win jackpots up to £50,000.

According to a market research study by *Experian Hitwise* (cf. Griffiths, 2013), *Facebook* users have a mean average session time of 22 minutes. The study also revealed that a quarter of those visiting *Facebook* visit entertainment websites (e.g., gaming and music sites) immediately after leaving *Facebook* (most of whom are adolescents and young adults). This shows companies (including those that offer gambling services) that there is a large potential market and that SNS users may be receptive to gambling via SNSs. Following the introduc-

tion of the *Bingo Friendzy* game (at present only available in the UK), other commercial forms of gambling including slot machine apps and sports betting have been made available to play via *Facebook*. Although players have to be aged 18 years to gamble on games hosted on *Facebook,* research has shown that adolescents regularly bypass the minimum age limits to have a *Facebook* profile simply by giving false information and/or with the help of their parents (Griffiths & Kuss, 2011; Kuss & Griffiths, 2011a; 2011b).

Whether it is gambling or gambling-type games, several reasons could potentially help bring adolescents to believe that these games represent similar forms of fun. Both utilise similar colourful graphics and attractive audio features (Messerlian et al., 2004; Temcheff, St. Pierre, Derevensky, 2011) and similar structural characteristics designed to prolong play (Parke & Griffiths, 2007; Karlsen, 2011; Griffiths, 2011; King, Delfabbro & Griffiths, 2011), and both satisfy similar emotional needs such as, arousal, competitiveness, escapism, and a relief from stress and boredom (Wood & Griffiths, 2007; Hellstrom, Nilsson, Leppert & Aslund, 2012). Furthermore, similarities may underpin cognitive misconceptions whereby players think that they are able to control the outcome of both types of games in the same manner (Derevensky, Gupta & Magoon, 2004), without fully appreciating that video games are typically designed to enable players to improve their performance and scores by persistent training, a characteristic which is never replicated in gambling games that are determined by purely random events.

It should also be noted that some «demo» games on real online gambling sites have been found to offer inflated pay-out rates of over 100% that were not maintained during the actual gambling for money sessions (Sevingy, Cloutier, Pellietier & Ladouceur, 2005). Furthermore, gambling-type games on SNSs (e.g., *Slotzmania*) have also been shown to have pay-out rates of over 100% (Parke, Wardle, Rigbye & Parke, 2013). Such features may lead adolescents to want to experience similar success with real money. Experimental research has also shown that gambling in «free-play» modes with inflated pay-out rates increases the size of bets made by those gamblers immediately after playing in the «free-play» mode (Frahm, Delfabbro & King, 2014). Furthermore, the lack of monetary rewards may not be very noticeable during online play as the Internet is a cash-free environment, and it is generally accepted that virtual representations of money (e.g., e-cash, chips, credits, tokens, etc.) lower the psychological value of the money (Griffiths, 2003b) meaning that individuals gamble greater amounts with virtual forms of money compared to actual money (Lapuz & Griffiths, 2010). Social/«demo» games may also constitute a powerful form of advertisement (Monaghan, Derevensky & Sklar, 2008), and they may increase overall familiarity with the mechanics of gambling and in turn may make adolescents more inclined to try gambling for real (King, Delfabbro, Kaptsis & Zwaans, 2014). Recent research has also reported that adolescents who play social games are more likely to gamble on the Internet (Wohl, Gupta & Derevensky, 2014).

However, a recent study by Carran and Griffiths (2015) examined gambling (including gambling-type games via SNSs) using focus groups comprising 200 adolescents aged 14 to 19 years old. The study was exploratory in nature, and thematic analysis was adopted in order to capture how teenagers categorise, construct, and react to gambling-like activities in comparison to monetary forms of gambling. Despite many similarities, substantial differences between monetary and non-monetary forms of gambling were revealed in terms of their engagement, motivating factors, strengths, intensity, and associated emotions. The adolescents made a clear differentiation between non-monetary and monetary forms of gambling and no inherent transition of interest from one to the other was observed among this particular set of participants. Furthermore, only limited evidence emerged of «demo» games and gambling-type games on SNSs being used as a practice ground for future gambling. However, the findings offered some support to the argument advanced by King et al. (2014) that exposure to social/«demo» gambling or gambling-like structures may increase adolescents' familiarity with the mechanics of gambling and how such games operate. This in turn may desensitise adolescents to the risks posed by gambling and may contribute to the erosion of many of the restraints that the sample displayed towards this form of activity.

Conclusions and recommendations

The new types of social gaming and gambling-like experiences that people of all ages are now being exposed to raise various moral, ethical, legal and social issues (Griffiths, 2013). Given that most of the issues highlighted here are somewhat speculative and based on theoretical considerations rather than robust empirical data, more empirical research is needed in these new online activities as the line between social gaming, non-financial forms of gaming, and gambling are beginning to blur.

Existing empirical evidence about the psychosocial effect of gambling-type games upon adolescents remains inconclusive, but distinctions should be made between «demo» games on gambling websites on the one hand, and social gambling games via social networking sites on the other (King, Delfabbro & Griffiths, 2010). As noted earlier, correlations have been found between «demo» games and gambling (King et al., 2010; Forest & McHale, 2012), and between social games and gambling (Wohl, Gupta & Derevensky, 2014). However, it should be noted that this association may be merely coincidental (Bednarz, Delfabbro & King, 2013; Gainsbury, Hing, Delfabbro Dewar & King, 2015), as those who seek out the free gambling games on gambling websites (as opposed to coming across them on other platforms like SNSs) may already have

a latent predisposition to be interested in gambling (Floros, Siomos, Fisoun & Geroukalis, 2013). Furthermore, it is also acknowledged that gambling for money and gambling socially may attract different types of individuals (Gainsbury & Derevensky, 2013). Social gaming in the form of gambling-type games may in fact dissuade players (including adolescents) from being tempted to gamble for real (Gainsbury et al., 2014), with the consequences of minimising their potential financial losses and with respect to adolescents avoiding access to unlawful activities.

Despite the mixed empirical evidence, it is recommended that stricter age verification measures should be adopted for social gaming, particularly where children and adolescents are permitted to engage in gambling-related content, even when real money is not involved (Parke et al., 2013). It is further recommended that age verification should be carried out in any game that requires the spending of money (even if it on virtual assets and items). Social media has enabled (and arguably encouraged) children and adolescents to spend money in-game, and there is certainly some anecdotal evidence that the techniques used to monetize social games have impelled a minority of children and adolescents to spend large amounts of money (Gradwell, 2013; Talbot, 2013).

To date, there is less evidence that youth are developing addictions to social games, although this is more due to the fact that scientific research has yet to study such activity. Given the growing evidence on adolescent online video game addiction and adolescent social networking addiction more generally (e.g., Kuss & Griffiths, 2011; 2012; Griffiths et al., 2014), there is no reason to suppose that a small minority of children and adolescents would not develop an addiction to some types of social gaming.

Although social gaming operators need to be more socially responsible in how they market their games and how they stimulate in-game purchasing, it is recommended that parents themselves also take responsibility when letting their children play social games or allowing them to download gaming or simulated gambling apps. Simple recommendations that can help stop children from unwittingly buying in-game items for real money or from engaging in gambling or gambling-type games via social networking sites include (i) not giving children access to online store passwords, (ii) personally overseeing any app or game that they download, (iii) using parental controls on phones and tablets, (iv) unlinking debit/credit card cards from online store accounts (i.e., do not store payment details with online stores), and (v) actually talking with children themselves about the games they play and the buying of in-game extras.

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Juegos de apuestas y juegos tipo apuesta en las redes sociales para adolescentes: Temas, preocupacions y recomendaciones

Los estudios señalan que los adolescentes hacen más uso de las redes sociales (RRSS) que la población en general. Aunque las RRSS en su origen servían para fomentar la comunicación entre los individuos, ahora ofrecen oportunidades para otros tipos de comportamientos, entre ellos las apuestas y los juegos. Este estudio centra su atención en las apuestas y en la participación en juegos parecidos a las apuestas a través de las RRSS, y consta de un resumen selectivo de algunas de las principales preocupaciones y temas que se han planteado en relación a las apuestas y los juegos tipo-apuesta que se juegan a través de las redes sociales. Por lo general, hay pocos datos empíricos relacionados con los efectos psicológicos sobre los adolescentes que participan en apuestas y en actividades parecidas a través de las RRSS, y las pruebas que sí existen no llevan a conclusiones definitivas. Sin emargo, aquí se recomienda la adopción de medidas más estrictas para verificar la edad de los que juegan a través de RRSS, sobre todo cuando los niños y los adolescentes tienen la posibilidad de interactuar con contenidos relacionados con las apuestas, incluso cuando no se juega con dinero de verdad.

Palabras clave: *Adolescentes y las apuestas; Jovenes y las apuestas; Redes sociales; Juegos sociales; Apuestas sociales*